

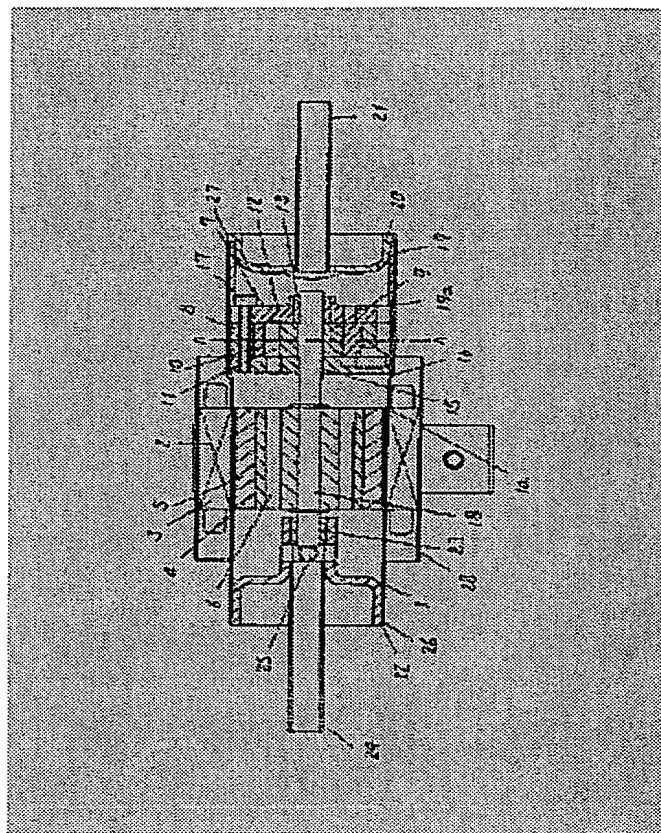
## REFRIGERANT PUMP

Patent number: JP2283887  
Publication date: 1990-11-21  
Inventor: SAWAI KIYOSHI  
Applicant: MATSUSHITA ELECTRIC IND CO LTD  
Classification:  
- international: F04C18/10  
- european:  
Application number: JP19890103852 19890424  
Priority number(s):

## Abstract of JP2283887

**PURPOSE:** To reduce the size and the weight of a pump and to improve reliability by a method wherein the stator of an electric motor is mounted to the outside of a closed container, a pump mechanism part is disposed to the inside of the closed container, and an intermediate shell having thickness higher than that of the closed container is located between the pump mechanism part and the closed container.

**CONSTITUTION:** When a rotor 4 of an electric motor 2 is rotated, a drive shaft 18 pressed in the rotor 4 is rotated, an inner rotor 9 engaged with the drive shaft 18 is rotated, and an outer rotor 10 engaged with the inner rotor 9 is rotated. As a result, a pump chamber 11 performs a pump action. When a pump action is produced at a pump mechanism part 7, a liquid refrigerant flows in the closed container 1 through a suction pipe 21. The liquid refrigerant flows through the suction port of a suction disc 12 to the pump chamber 11. After the liquid refrigerant is boosted in the pump chamber, it flows in the closed chamber 1 through the delivery port of a delivery disc 15 again. Thereafter, the liquid refrigerant flows through a refrigerant flow passage 6 of the rotor 4 and a hole 25 of an end plate 22 and flows through a delivery pipe 24 to the outside of the closed container 1.



Data supplied from the esp@cenet database - Patent Abstracts of Japan